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OM nucleic - nucleic search using few model

Run on: September 30, 2004, 10:44:58 ; Search time 11824 Seconds

11385.611 Million cell updates/sec

11385.611 Million cell updates/sec

Perfect score: 3106
Sequence: 1 catggatagacgggtgcgcccg.....taaaaaaaaaaaaaaaa 3106

Scoring table: IDENTITY NJC
Gapop 10.0 , Gapext 1.0

Searched: 3470272 seqs, 21671516995 residues

total number of hits satisfying chosen parameters: 6940544
Minimum DB seq length: 0

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database : GenEmbl:
1: gb|ba,*
2: oh|hr,*

3: gb_in:
4: gb_out:
5: ab_out:

6: gb pat: *
7: gb ph: *
8: gb ph: *

9: qb-
8: gbrdr:
7: *
6: 10:
5: qb-
4: 10:
3: *
2: 10:
1: 10:

11: *gb*₋*sy*₋
12: *gb*₋*sy**
13: *gb*₋*un**

14: qb vi,*
15: em_ba,*
16: em_fun,*

17: em hum:**
 18: em_ini**
 19: em_mui*

20: em_om: *
21: em_or: *
22: em_oy: *

23: em_pat: *
24: em_ph: *
25: em_pl: *

26: em ro: *
27: em sts: *
28: em in: *

29: em-vi: *
 30: em-htg hum: *
 31: em-h-r-i; um: *

32: em⁻htg⁻⁻other:
33: em⁻htg⁻mus:
34: em⁻htg⁻mus:

35: em htg rod: *
36: em htg man: *

37: ungoove
38: em sy:
39: em htgo hum:*

40: em_htgo_mus:/*
41: em_htgo_other:/*

Pred. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Result No.	Score	Match Length	DB	ID	% SUMMARIES		Description
					Query	Length	
1	3106	100.0	3106	6	AX95268		AX95268 Sequence
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3	3102.8	99.9	3248		BC005496		BC005496 Mus muscu
4	3102.8	99.9	3248	10	AB049189		AB049189 Rattus no
5	2595	83.5	3174		AB037898		AB037898 Rattus no
6	2313.6	57.5	2568	10	BC030532		BC030532 Homo sapi
7	1905.6	61.4	3273		BD274671		BD274671 Matriptas
8	1889.8	60.8	3149	6	AF118224		AF118224 Homo sapi
9	1889.8	60.8	3149	9	AF118224		AF118224 Homo sapi
10	1884.6	60.7	3128	9	ABP30036		ABP30036 Homo sapi
11	1883.2	60.6	3147	6	AZ081745		AZ081745 Sequence
12	1883.2	60.6	3147	6	AR229704		AR229704 Sequence
13	1883.2	60.6	3147	6	AR229712		AR229712 Sequence
14	1883.2	60.6	3147	6	AR230930		AR230930 Sequence
15	1883.2	60.6	3147	6	AR230938		AR230938 Sequence
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18	1883.2	60.6	3147	9	AP057145		AP057145 Homo sapi
19	1752.6	56.4	2955	6	BD274670		BD274670 Matriptas
20	1530.8	49.3	2900	6	AK081725		AK081725 Sequence
21	1530.8	49.3	2900	6	AR229705		AR229705 Sequence
22	1530.8	49.3	2900	6	AR430931		AR430931 Sequence
23	1530.8	49.3	2900	6	HSU20428		HSU20428 Human SNC19
24	1518.2	48.9	2838	6	AX921703		AX921703 Sequence
25	1175.8	37.9	2139	9	BC005826		BC005826 Homo sapi
26	945.4	30.4	1823	9	BC018146		BC018146 Homo sapi
27	943.8	30.4	2152	9	AR379612		AR379612 Sequence
28	809.6	26.1	3487	5	AB038498		AB038498 Xenopus l
29	701.2	22.6	1553	6	AR263832		AR263832 Sequence
30	623.2	20.1	23594	10	AC11542		AC11542 Mus muscu
31	556.4	17.9	726	6	AX473052		AX473052 Sequence
32	551.8	17.8	723	6	E13204		E13204 Human cDNA
33	359.6	11.6	236387	2	AC096142		AC096142 Rattus no
34	359.6	11.6	261906	2	AC112632		AC112632 Rattus no
35	359.6	11.6	277797	2	AC12847		AC12847 Rattus no
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ALIGNMENTS

RESULT 1	AX395268	AX395268	Sequence 5 from Patent	3106 bp	DNA	linear	PAT 18-MAY-2002
LOCUS	AX395268	AX395268	WOO2003787.				
DEFINITION							
ACCESSION	AX395268	AX395268.1	GI:21066293				
VERSION							
KEYWORDS							
SOURCE	Mus musculus (house mouse)						
ORGANISM	Mus musculus						
REFERENCE	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.						
AUTHORS	Allen, K.D. and Leviten, M.W.						
TITLE	Transgenic mice containing targeted gene disruptions						
JOURNAL	Patent: WO 0203787-A 5 17-JAN-2002;						

Db	2041 ATGACAAATTCAAGTACTCACTACAGATGGAGGGCTCTGGGTCTGCG 2100	LOCUS	BC005496	DEFINITION	Mus musculus suppression of tumorigenicity 14 (colon carcinoma), mRNA (cDNA clone MGC:7395 IMAGE:3488059), complete cds.
QY	2101 ACCAGAGGAGGCGAGTCTCTGGGGCGAGGAGCTGAGCTCAAAGTATCATACCC	REFERENCE	BC005496	VERSION	BC005496.1 GI:13529565
Db	2101 ACCAGAGGAGGCGAGTCTCTGGGGCGAGGAGCTGAGCTCAAAGTATCATACCC	AUTHORS	Klausner,R.D., Collins,F.S., Wagner,L., Shemmen,C.M., Schuler,G.D., Strausberg,R.L., Reingold,E.A., Grouse,L.H., Derge,J.G., Altschul,S.F., Zeeberg,B., Buetow,K.H., Schaefer,C.F., Bhat,N.K., Diachenko,L., Marinelli,K., Farmer,A.A., Rubin,G.M., Hong,L., Stapleton,M., Soares,M.B., Donaldson,M.F., Casavant,T.L., Scheetz,T.E., Brownstein,M.J., Urdin,T.B., Toshiyuki,S., Carninci,P., Prange,C., Raha,S.S., Lognelli,N.A., Peters,G.J., Abramson,R.D., Mulhaly,S.J., Bosak,S.A., McEwan,P.J., McKernan,K.J., Malek,J.A., Guarante,P.H., Richards,S., Worley,K.C., Hale,S., Garcia,A.M., Gay,L.J., Hulyk,S.W., Villalon,D.K., Muzny,D.M., Sodergren,E.J., Lu,X., Gibbs,R.A., Fahay,J., Heitton,E., Kettlemen,M., Madan,A., Rodriguez,S., Sanchez,A., Whiting,M., Madan,A., Young,A.C., Shevchenko,Y., Bouffard,G.G., Blakesley,R.W., Touchman,J.W., Green,E.D., Dickson,M.C., Rodriguez,A.C., Grimwood,J., Schmutz,J., Myers,R.M., Butterfield,Y.S., Krzywinski,M.I., Skalska,U., Smilus,D.E., Scherich,A., Scheir,J.B., Jones,S.J. and Marra,M.A.		
QY	2161 ACCTTCCCTCAATGATTACCTTGACTATGACATGACATGCCCTGCTGAGAGT	TITLE	human and mouse cDNA sequences		
Db	2161 ACCTTCCCTCAATGATTACCTTGACTATGACATGACATGCCCTGCTGAGAGT	JOURNAL	Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)		
QY	2160 ACCAGAGGAGGCGAGTCTCTGGGGCGAGGAGCTGAGCTCAAAGTATCATACCC	COMMENT	2 (bases 1 to 3248)		
Db	2160 ACCAGAGGAGGCGAGTCTCTGGGGCGAGGAGCTGAGCTCAAAGTATCATACCC	REFERENCE	2248		
QY	2221 CGGTTGACTACAGACCCCTGCGCCCATCTGCCTCTCTGATGCTACCATGCTCC	AUTHORS	Eukaryota; Metazoa; Chordata; Craniata: Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.		
Db	2221 CGGTTGACTACAGACCCCTGCGCCCATCTGCCTCTCTGATGCTACCATGCTCC	DEFINITION	Mus musculus (house mouse)		
QY	2280 CGTGTGGCAAGGCGACATCTGGTCACGCGCTGGGGCACACAAAGAGGGTACCGAG	VERSION	Mus musculus		
Db	2280 CGTGTGGCAAGGCGACATCTGGTCACGCGCTGGGGCACACAAAGAGGGTACCGAG	KEYWORDS	MGC.		
QY	2281 CTGCTGGCAAGGCGACATCTGGTCACGCGCTGGGGCACACAAAGAGGGTACCGAG	FEATURES	source		
Db	2281 CTGCTGGCAAGGCGACATCTGGTCACGCGCTGGGGCACACAAAGAGGGTACCGAG	QUALIFIERS	organism="Mus musculus"		
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QY	1861	AAACTCTGATGCTGSGCTGAGCTTACAAAGGTGGCTGGGGGGGGGGGGGGGGGG	1920	QY
Db	1971	AAACTCTGATGCTGSGCTGAGCTTACAAAGGTGGCTGGGGGGGGGGGGGGGGGG	2030	Db
QY	1921	ATGGGAGGAGGGGGAGTGCCCTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1980	QY
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QY	1981	TGTGTGGGGCTCTGCTCATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT	2040	QY
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Db	2211	ACCAGAGCAAGCGCASTGCGCTCTGGGTGCGAGGCTAACGATCATCACCC	2270	DEFINITION Rattus norvegicus mRNA for membrane bound arginine specific serine protease, complete cds.
QY	2161	ACCCCTCTTAATGATTCACTTGAGATGACATCGCTTGAGGCTGGGAAGT	2220	ACCESSION AB049189
Db	2271	ACCCCTCTTAATGATTCACTTGAGATGACATCGCTTGAGGCTGGGAAGT	2270	VERSION AB049189.1
QY	2221	CGGTGGAGTAGCAGCACCGCTCTGGGGCACACAAGAGGGAGTACCGGAG	2280	KEYWORDS
Db	2331	CGGTGGAGTAGCAGCACCGCTCTGGGGCACACAAGAGGGAGTACCGGAG	2330	SOURCE Rattus norvegicus (Norway rat)
QY	2281	CTGCTGGCAAGGCCATCTGGGCAAGGGCTGCGCCATCTGGCTGCTGCTG	2340	ORGANISM Mammalia; Eutheria; Chordata; Craniata; Vertebrata; Buteleostomi; Rattus.
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QY	2341	CGCTGATCCCTGAGAGGGTAGATCGCTCATCACAGGACACCTGAGCTCA	2400	AUTHORS Inoue,H., Takahashi,K. and Kishi,K.
Db	2451	CGCTGATCCCTGAGAGGGTAGATCGCTCATCACAGGACACCTGAGCTCA	2510	JOURNAL membrane-bound arginine specific serine protease published Only in DataBase (2000)
QY	2401	TGCCGAGGAGATACCCACCGATGATGTTGTTCTCAGTGGGGTGTGACT	2460	REFERENCE 2 (bases 1 to 3174)
				FEATURES Submitted (22-SEP-2000) Hideshi Inoue, Tokyo University of Pharmacy and Life Science, School of Life Science, 142-1 Horinouchi, Hachioji-shi, Tokyo, 192-0392, Japan (E-mail:hinoue@ls.toyaku.ac.jp), Tel:81-426-76-7153, Fax:81-426-76-7157)
				Location/Qualifiers

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Db	1625	TCTGCAGGCCCTCTTGCTGAGCAGTCAACGACTGTCAGAAG	1684	Db	2705	ACACAACCCACCATGACTCGCAAAGGATGCCAACGGGTACCTGATCAGGAG	2764
Qy	1621	AGGAGCGCTGCACTGCTGAGCTGAGCTGAGCAGTCAACGACTGTCAGAAG	1680	Qy	2701	GAACACTGACGACATTATGGTGTGGCTCCCCCAACACCAACCCAGACTGTGACT	2760
Db	1685	AGGAGCGCTGCACTGCTGAGCTGAGCAGTCAACGACTGTCAGAAG	1744	Db	2765	GATCGTGAACGACATTGTCGTGGCTCTCCCACATCCAGACTGTGACT	2819
Qy	1681	AGAGCGAGAAGTGAATGGAGAACACTGGAGATGGCTGAGGAGCTGAGGAG	1740	Qy	2705	GCATCCITAGACTCGAGTCTTCCA-----AAAGGGACCCCTCAAGCTG	2811
Db	1745	AGAGCGAGAAGTGAATGGAGAACACTGGAGATGGCTGAGGAGCTGAGGAG	1804	Db	2820	GCTTCCTCTAGGACTCTAGAATCTTCCTGAGCTTCCAAGTGGACCTCAGGAGTGG	2879
Qy	1741	ACAGGGTAATGTCGTCCTGACACAAATACTACCTACCCCTGCCAAATGGCCCTGTC	1800	Qy	2812	AGAGAGACTTGGCTACTGCCAGCTG-----GGGGAGGGTTGAGGAGCCT	2867
Db	1805	ACAACTGTGATGCCCTCTCTGACCAAATACTACCTACCCCTGCAAAATGGCCCTGTC	1864	Db	2880	CGAGAGACTCTGCTGCTGCCCCAGCCCTTGGGAGGAGCTTCCAGGAGCT	2998
Qy	1801	TGAGGAGGCAACCCCTGAGCTGATGGAGACCGACTGAGGATGGTCCGATGAGA	1860	Qy	2886	TCCCTCTAGGCCCTAGCTGGTGGAGATGATGTCGCCGAGAGCTGCTTC	2922
Db	1865	TGAACTAGGCAACCCCTGAGTGGAGGAGAAAGGACTGAGGATGGGAGGAG	1924	Db	2940	T-CCCTCTAACCTGAACTGCTGTAAGAGGAGTGTGAGGAGCT	2998
Qy	1861	AAAAGTGTGACTGTTGAGCTTACAAACAGCTCGCTGGTGTGGTACCGA	1920	Qy	2923	-----AATGTCATGAGCTCCGGAGCCATGGAGGGGCTCAAGGTGTC	2973
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Db	1981	TGTGTGGGAGCTCTCATCTCTCTGACTGGCTGCTCTGAGCTATGCTTCAAG	2044	Qy	3034	TGTGTGGTGTGCCAGGGTGGTATTGAGGATAAACATTATTCTTTAAAA	3093
Qy	2045	TGTGTGGGAGCTCTCATCTCTCTGACTGGCTGCTCTGAGCTATGCTTCAAG	2040	Db	3115	TGTGTGGCT-----GTTATTGAGGAGTAAACATTATTCTTTAAAA	3161
Db	2041	ATGAGCAATTGAGTACTAGCTACAGTACAGTGTGGCTCTGGCTGTCTG	2100	Qy	3094	AAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGA	3106
Db	2105	ATGAGCAATTGAGTACTAGCTACAGTACACACAGCTGGGAGCTTCTGGCTGTCTG	2164	Db	3162	AAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGA	3174
Qy	2041	ACGAGGAAAGCCAGTGCTCTGGCTCAGGAGCTGAGCTCAAGATCATCACCC	2160				
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Qy	2161	ACCTCTCTCAATGATTCACCTCTGACTATGACATACATGGCTGAGCTGAGT	2220				
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Qy	2221	CGTGTGGAGTACGACCTGCGGGCCATGCTCTGGCTGAGCTACATGGCTCC	2280				
Db	2285	CGGAGAGTACGACCTGCGGGCCATGCTCTGGCTGAGCTACATGGCTCC	2344				
Qy	2281	CGTGTGGAGTACGACCTGCGGGCCATGCTCTGGCTGAGCTACATGGCTCC	2340				
Db	2345	CGGCCGCAAGCCATCTGGGTACAGCTGGGCCACAGGAAGAGGAGACTGGAG	2404				
Qy	2341	CGCTGATCTGAGAAGGGTGGAGATCGCTGTCATCAACAGACCTGCTGAGCTCA	2400				
Db	2405	CACTGATCTGCAAGAAGGGAGATCCGGTCAACAGACCTGCTGAGCTCA	2464				
Qy	2401	TCGGCGAGTACCCACGATGAGCTGGCTGGGGTCTCAGGGGGTGTGACT	2460				
Db	2465	TGCCGAGCAGTACCCACGATGAGCTGGCTGGGGTCTCAGGGGGTGTGACT	2524				
Qy	2461	CCTGCCGGGACTCTGGTGCCTCTGCAAGGGAGAGTGGGGAGATGTGTC	2520				
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				AUTHORS	AB037898	AB037898	
				DEFINITION	Rattus norvegicus	2568 bp mRNA	linear
				ACCESSION	AB037898	complete cds.	ROB 20-OCT-2001
				VERSION	AB037898_1	GI_9650963	
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				ORGANISM	Bukar-Yota; Melaoza; Chordata; Craniata; Vertebrata; Euteleostomi; Rattus.		
				REFERENCE	Satomi,S., Yamasaki,Y., Tsuzuki,S., Hitomi,Y., Iwanaga,T. and Fushiki,T.		
				TITLE	A role for membrane-type serine protease (MT-SP1) in intestinal epithelial turnover		
				JOURNAL	Biochem. Biophys. Res. Commun. 287 (4), 995-1002 (2001)		
				MEDLINE	2148807		
				PUBLISHED	1153963		
				2 (bases 1 to 2568)			
				AUTHORS	Tsuzuki,S.		
				TITLE	Direct Submission		
				JOURNAL	Submitted (26-June-2000) Satoshi Tsuzuki, Kyoto University, Graduate School of Agriculture, Nishimadai, Sakyo-ku, Kyoto 606, Japan		

FEATURES
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 AGKALWWTGWHTKEGGTGAIILOKBRIRVQINOTCBLLELQQITPRMPCUGFLGGV
 DSCQGDGGPLSVEKDGRIFQAVGVWSWEGCAQRNKPGVYTRIVEPVDRDWEKEQTV"
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 Best Local Similarity 93.8%; Pred. No. 0;
 Matches 2409; Conservative 0; Mismatches 159; Indels 0; Gaps 0;
 QY 63 ATGGTAGCAATGGGGCGAAGGCCGAGGGGGCTCAGAACATTGGCGCGGAGTC 122
 1 ATGGGAAACATGGGGCGAAGGCCGAGGGGGCTCAGAACATTGGCGCGGAGTC 60
 Db 123 AAGTACAACCTCCGGCTAGAGAATGAGATGAGATGGCTTGAGGAGGTGTGGAGITCTGCCT 182
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 183 GCGAACATGCCAAGAAAGTGACAGCGGCCAGGGCTGGCTGGCTGGCTGGCA 242
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 421 TCGATGTGAACTGCTCTCAGTGGAGGCGAGCTCATGCTCTACTATGGTAGAGTCAG 480

OY	1623	GAGGCCTGGCTGTGCTGATGGAGAATTCAGTTCAATGGAACTGTCCTCG	1682	matriptase, epithelin), mRNA (cDNA clone MGC:40392 IMAGE:5213189), complete cds.
Db	1561	GAGGGCTGGTGTCTCCGGGGATTCAGTGGAACTGGCTCATGGAGAATGTCCTCG	1620	ACCESSION BC030532
OY	1683	AGCCAGAAGTGTAATGGGAGGAACACTGGAGATGCTGAGGAGGCTCTGAG	1742	VERSION BC030532.1 GI:20988874
Db	1621	AGCCAGCAGTGATGGAGAAGGAGACTGGAGATGGCTCTGAGGAGGCTCTGAG	1680	SOURCE MGC.
OY	1743	AGGGTAATGTCGCTCTGCCAACATTACCGTGCACAAATGGCCCTCTGCTG	1802	ORGANISM Homo sapiens (human)
Db	1681	AATGCTGAATGCCGCTCTGACCAATAACCTACCCPACCGTGCACAAATGGCTCTG	1740	REFERENCE 1 (bases 1 to 3273)
OY	1803	AGCAGGGACCTGAGTGGATGGAGACGACTGAGCTGAGCTGAGCTGAGAAA	1862	AUTHORS Klausner,R.D., Collins,P.S., Wagner,L., Sheinman,C.M., Schueler,G.D., Altschul,S.F., Zeeberg,B., Buetow,K.H., Schaefer,C.F., Bhat,N.K., Hopkins,R.F., Jordan,H., Moore,T., Max,S.I., Wang,J., Hsieh,F., Diatchenko,L., Marsilia,K., Farmer,A.A., Rubin,G.M., Hong,L., Stapleton,M., Soares,M.B., Balondio,M.F., Caravanti,T.L., Scheetz,T.E., Brownstein,M.J., Usdin,T.B., Toshiyuki,S., Carninci,P., Prange,C., Raha,S., Logeland,N.A., Peters,G.J., Abramson,R.D., Mulahy,S.J., Bosak,S.A., McEwan,P.J., McKernan,K.J., Malek,J.A., Guarante,P.H., Richards,S., Worley,K.C., Hale,S., Garcia,A.M., Gay,L.J., Hulyk,S.W., Villalon,D.K., Muzyz,D.M., Sodergren,E.J., Lu,X., Gibbs,R.A., Fahey,J., Heitton,E., Kettelman,M., Madan,A., Rodrigues,S., Sanchez,A., Whiting,M., Madan,A., Young,A.C., Stevchenko,Y., Bouffard,G.G., Blakesley,R.W., Touchman,J.W., Green,E.D., Dickson,M.C., Rodriguez,A.C., Grimwood,J., Schmitz,J., Myers,R.M., Butterfield,D.Y., Krzywinski,M.I., Skalska,U., Smalius,D.E., Schnurch,A., Schein,J.E., Jones,S.J. and Matra,M.A.
OY	1863	AACCTGCTGACTGAGCTGAGCTGAGATCTTACCAAACAGAGCTGCTGAGTGGCACGAT	1922	FAIRNESS
Db	1801	AACCTGCTGACTGAGCTGAGATCTTACCAAACAGAGCTGCTGAGTGGCACGAT	1860	Carninci,P., Prange,C., Raha,S., Logeland,N.A., Peters,G.J., Abramson,R.D., Mulahy,S.J., Bosak,S.A., McEwan,P.J., McKernan,K.J., Malek,J.A., Guarante,P.H., Richards,S., Worley,K.C., Hale,S., Garcia,A.M., Gay,L.J., Hulyk,S.W., Villalon,D.K., Muzyz,D.M., Sodergren,E.J., Lu,X., Gibbs,R.A., Fahey,J., Heitton,E., Kettelman,M., Madan,A., Rodrigues,S., Sanchez,A., Whiting,M., Madan,A., Young,A.C., Stevchenko,Y., Bouffard,G.G., Blakesley,R.W., Touchman,J.W., Green,E.D., Dickson,M.C., Rodriguez,A.C., Grimwood,J., Schmitz,J., Myers,R.M., Butterfield,D.Y., Krzywinski,M.I., Skalska,U., Smalius,D.E., Schnurch,A., Schein,J.E., Jones,S.J. and Matra,M.A.
OY	1923	GGGGACAGGGGCGAGTGCCTCGGAGGTGAGCTCCACGCCCTGGGCGAGGCCACTG	1982	COMMENT
Db	1861	GGGGACAGGGGCGAGTGCCTCGGAGGTGAGCTCCACGCCCTGGGCGAGGCCACTG	1920	1 (bases 1 to 3273)
OY	1983	TGCGGGCTCTGCTCATCTCTGACTGGCTCTGCTGCTCTGCTGCTCTGCTGCTG	2042	TITLE
Db	1921	TGCGGGCTCTGCTCATCTCTGACTGGCTCTGCTGCTCTGCTGCTCTGCTG	1980	JOURNAL Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
OY	2043	GACAAATTCTAAGTACTCAACTACGATGTTGGCTTCCCTGGGTGTGTGGAC	2102	PUBMED 22388257
Db	1981	GAGCAATTTCAGTACTCAACCACTGAGGACGCTTACCTGAGCTGAGAGTC	2040	REFERENCE 2 (bases 1 to 3273)
OY	2103	CAGAGCAGGAGTCTGGTACCTGAGCTTACCTGAGCTGAGCTGAGAGTC	2162	AUTHORS Strausberg,R.
Db	2041	CAGAGCAGGCTGCTGGTACAGGAGCTAACGAGCTAACGAGCTAACGAGCTAAC	2100	COMMENT TITLE
QY	2163	CTTCCCTCATGATTCACTTGGTACATGGCTTCTGCTGATATAACCTACCC	2222	JOURNAL Submitted (07-MAY-2002) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, USA
Db	2101	CCTTCCTTTAATGACTTTACTTTCGACTATGACATTCCTCTGAGCTGAGAGCG	2160	PUBLISHER NIH-MGC Project URL: http://mgc.nci.nih.gov
QY	2223	GTGGAGTACACGACCGTGTGCTGCCCATCTGCCCTGTGCTGACCTGCTCCT	2282	COMMENT
Db	2161	GGAGACTACAGTACGACTCTGGGCCCATCTGCCCTGTGATATAACCTAC	2282	COMMENT
QY	2283	GCTGGAAGGCACTGGGTCACAGCTGGGCAACAAAGAGGGGTACCGGAGCG	2342	COMMENT
Db	2221	GCCGGCAAGGCATCTGGTCACAGCTGGCCACAGAAAGAGGAACTGGAGCA	2280	COMMENT
QY	2343	CTGATCTGGAGGAGATCGGTCACAGACACCTGTGAGGACCTGAGGACCTG	2402	COMMENT
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QY	2403	CGCACAGATACCCACGGATGATGATGGGTCTCTGAGCTGGGCTGACTCC	2462	COMMENT
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DEFINITION		3273 bp mRNA linear PRI 07-OCT-2003		1 . 3273

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Qy	1381	TCTCTAGCTAGTACCTCTCTACCACTCAACCTCAACGACCGGT	1440	Qy	2461	CTGCCAGGGTACCTGGGCCCTTGTAAGGGAGAATGGGGGAGATGGGAGTTCC	2520
Db	1436	TCTCTAGCTAGTACCTCTCTACCACTCAACGACCGGT	1495	Db	2516	CTGCCAGGGTATCCGGGACCCCTGTCAGGTGAGGGAGTGGGGAGTTC	2575
Qy	1441	AGACTGGAGGTCTCATCGAAAGGAACTCGCGCTGGAGACTGCGG3ATT	1500	Qy	2521	AGGCTGTTGTTGAGCTGGGTAAAGSTGCTCAGAGGAAGAAGCAGGCTGACA	2580
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Db	1976	ATGCGATGAGGGCGAGTGGCCCTGGAGGTAAGCCGATGCTGCTGGGACCA	2035				
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Qy	2161	ACCCCTCTTCATGATGATCACCTGAGCTGGACGCCCTCTGGCTGAGTGGAGT	2220				
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Qy	2221	CGGTGGAGTACAGACCGCTGGCCCACTGCGCTGATGCTACCATGCTTCC	2280				
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				VERSION	BD274671.1	GI:33084439	PAT
				KEYWORDS	JP 20022339093-A/2.		
				SOURCE	Homo sapiens		
				ORGANISM	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.		
				REFERENCE	Dickson, R.B., Lin, C., Johnson, M., Wang, S. and Enye, I.		
				AUTHORS	Matriptase, serine protease and application of the same.		
				TITLE	Patent: JP 20022339093-A	2	
				JOURNAL	GEORGETOWN UNIVERSITY	19-NOV-2002;	
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					PD	19-NOV-2002	
					PP	10-MAR-2000	
					PR	12-MAR-1999	
					PI	US 6,124,006	
					PI	ROBERT B DICKSON, YOUNG LIN, MICHAEL JOHNSON, SHAOYING WANG, ISTWAN ENYEDEY	
					PC	A61K45/00, A61K35/78, A61K51/00, A61P17/00, A61P35/00, A61P3/00, A61P43/00, C07K16/40, C12N1/15, C12N1/19, C12N1/21, C12N5/10	
					PC	C12N9/64, C12N15/09, G01N33/577//C12P21/08, A61K49/02, C12N15/00,	
					PC	C12Q1/37, G01N33/53, G01N33/577//C12P21/08, A61K49/02, C12N15/00,	
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Matches	2222;	Conservative	0;	Mismatches	504;	Indels	5;	Gaps	3;
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Db	23	GGCTGGGGACCATGGGGACGATGGGGCCGAGGGGGCCGAAAGGACTT							Db
QY	110	CGGGGGGGACTCAAGTGACCAACTCCGGCTAGAGAACATGAGGGTTGAGGGGT							QY
Db	83	CGGGGGGGACATCAAGTGACCAACTCCGGCGAGAGAAGTGAATGGGGGT							Db
QY	170	GGAGTCTGCTGGCTGCGACAACTGGCCAGAAAGTGGAGAAGGAGGAGGAGGT							QY
Db	143	GGAGTCTGCTGGCTGCGACAACTGGCCAGAAAGTGGAGAAGGAGGAGGAGGT							Db
QY	230	GGTGTCTGGGGAGTGCTGAGCTCTCTGCTCTCTCATGGCTGCTGCTGTT							QY
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QY	290	CTGGCACTCCATATGGAAATGTCGGGGTCAAAGGCTTCATGGCCATCTGGAT							QY
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Qy	770	TCCCTACCGGGCATGCCGCTTGCTGAGCTGCTTACCCGGCTTCCCTGCT	829	Qy	1850	CTCCGATGAGAAAACCTGAGTGTAGGGCTGCTGAGCTTACCAACAGGCTCGGTG	1909
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Qy	743	CCTTACCCGCTCATGCCGTGAGCTGAGCCCTGAGGGAGGAGCCGACTG	802	Db	1910	TTGTGSCACGATGCGAGGAGGGAGTGCSCCTGAGGAGGACTCCAGGCGCCTG	1969
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Db	1343	CGACACCGGTTCTAGTGTAACTCTCTAGCTACGTCAGTCAG	1402	Qy	2363	CGACACCTCTGGGAGGAGGAGGAGGAGGAGGAGGAGGAGG	2422
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VERSION AB030036.1 GI:12249014
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ORGANISM Homo sapiens (human)
Bukayto; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (sites)
AUTHORS Yamaguchi,N. and Mitsui,S.
TITLE Molecular cloning of a novel transmembrane serine protease
expressed in human prostate
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 3128)
AUTHORS Yamaguchi,N. and Mitsui,S.
TITLE Direct Submission
JOURNAL Submitted (14-JUL-1999) Nozomi Yamaguchi, Kyoto Prefectural
University of Medicine, Res. Ins. Geriatric; Kawaramachi Hirokoji,
Kyoto, Kyoto 607-8566, Japan (E-mail: nozomi@koto.kpu-m.ac.jp,
Tel:81-75-251-5848, Fax:81-75-2251-5848)
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ORIGIN

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Best Local Similarity 81.4%; Pred. No. 0; Mismatches 0; Indels 5; Gaps 3;
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AUTHORS	O'Brien, T.J. and Tanimoto, H.		
TITLE	TADG-15: an extracellular serine protease overexpressed in breast and ovarian carcinomas		
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 VERSION AR229704.1 GI:27269434
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 SOURCE Unknown.
 ORGANISM Unknown.
 UNCLASSIFIED Unclassified.
 REFERENCE 1 (bases 1 to 3147)
 AUTHORS Leon,J.W.
 TITLE Imaging member containing heat switchable carboxylate polymer and method of use
 JOURNAL Patent: US 6451500-A 1 17-SEP-2002;
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QY	345	AGGATACAATGAGATCTTCTGGATCCGTATGAGAACTCCACAGATTATC	404	QY	1425	CGGATOTCTCTGCAGAGATGGAGCTGGCATCCAAAGAACACTGGCTCGACGGCTG	1484
Db	305	AGGATACAATGAGATTTCTGGATCCGTACAGAACTCCACAGATTGTTGTA	364	Db	1385	GGGCAAGTCAGTCAGCAGCGCACGGGGGTGATCCGGAAAGAAGCTGGCTG	1444
QY	405	AGCTTGCCAGGAGGAAGGCTGAGAGGGCTGAGTGTGAGATGAGCTGCTG	464	QY	1485	CGAGACTGCCGATTATACTGATGAGGGTACTGCGGATGAACTCCACAGATC	1544
Db	365	AGCTTGCCAGGAGGAAGGCTGAGAGGGCTGAGTGTGAGATGAGCTGCTG	424	Db	1445	GGGATGCGACGACACASAGATGAGCTAAGTCCAGTGGCTGATCGCTAC	1504
QY	465	GTTCTTACACAGAGAGAGTCGGTAACTGCTGAGTGTGAGATGAGCTGCTG	524	QY	1545	ACGTGCAAAGAACAGTTCCTGCAGCCCTCTCTGGTGTGACAGTGTGAACTG	1604
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QY	585	GTGAGGAGAGTAAATGGACCCGAGAGGGGAGACTGAAACTCTTGTGTA	644	QY	1665	GGGAGTGTCTCTAGAGCCAGAGTGTGAGTGTGAACTGAGGAGATG	1724
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QY	1065	CCCAAGATGAGCAGCTGCGGCTTCTGGAGTGTGAGGAGCATGGCCC	1124	QY	2145	AAACGATATCATCACCAACCTCTCTCATGAGTTGAGGAGGAGGAGGAG	2204
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AUTHORS	Leon, J.W.	Qy
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Qy	1725	GAGGAGGCTTCATGTCAGCTGACAGCTGAGTCGCTGACCAATACTAACCTCTG 1784			
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Qy	1785	CAAATGGCTCTGTCAGAGGCAACCTGAGCTGATGGGAGAACGGCTGAGTC 1844			
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Qy	2385	ACCTGTGAGGACTCATGGCGAGATCACCCACGATGATGTCGGTTCTC 2444			
Db	803	ACCTGTGAGGACTCATGGCGAGATCACCCACGATGATGTCGGTTCTC 744			
Qy	2445	AGTGGGGTGTGACTCTCTCCAGGTGACTCTGGTCAAGGGAGCTCTGG 743			
Db	743	AGGGGGGGGTGACTCTCTCCAGGTGACTCTGGTCAAGGGAGCTCTGG 684			
Qy	2505	GATGGGGTGTGACTCTCTCCAGGTGACTCTGGTCAAGGGAGCTCTGG 2504			
Db	683	GATGGGGTGTGACTCTCTCCAGGTGACTCTGGTCAAGGGAGCTCTGG 624			
Qy	2565	AAGCCAGGGGTGACTACAAGGCTCTGAGTCGGACTGGATCAAAGGCAACTGG 2624			
Db	623	AAGCCAGGGGTGACTACAAGGCTCTGAGTCGGACTGGATCAAAGGAACTGG 564			
Qy	2625	GTATGAGCAGCATGGAGACAGGCCACACACACACACAGGGATGCCAGCATGGCA 2684			
Qy	585	GGGAGGAGGTGAGTACATCCACCCAGGACGGCACTGAAATCTCTGCTAACCA 644			

Db	545	GAGGAGCGCTGTAGTCATGCTGCCCGGGGGGCTCCCTGAATGCTGTCACC	604	QY
QY	645	TCTGTGTTGCCCTCCCATGACCCCCAGAAATGTCGAGAGGACTTAGGAACTGC	704	Db
Db	605	TCAGTGGGGCTTCCACGGGACTTCAAAACAGTACAGAGGACCAAGCTGC	664	QY
QY	705	AGTTTGCCCTGATACCCGATGGTGGAGCTGAGAGTGAACGCTTACCCCTGGCTCCC	764	Db
Db	665	AGCTTGGCTCACCCGGATGGTGGAGCTGAGAGTGAACGCTTACCCCTGGCTCCC	724	QY
QY	765	AACATGTTTACCCGCGATGGCTGGAGCTGAGAGTGAACGCTTACCCCTGGCTCCC	824	Db
Db	725	GACAGCCCTAACCCGCTCATGCCGCTGAGAGTGAACGCTTACCCCTGGCTCCC	844	QY
QY	885	CTGGTACCCGTTGATACATASCGTGGCCCTGAGGGAGGGACGCTC	784	Db
Db	845	CTGGTACCCGTTGATACACCCGTGAGGGAGGGACGCTC	944	QY
QY	825	GTGCTAGCTCACCTCCGAGCTGAGCTGATGTCGTCCTGAGCTGAGCTG	884	Db
Db	785	GTGCTAGCTCACCTCCGAGCTGAGCTGAGCTGAGCTG	904	QY
QY	945	GGCACTTCTCACCCCTCCATACACCTGACTTCTCTCCGAGCTC	1004	Db
Db	905	GGAACCTTCTCACCCCTCCATACACCTGACTTCTCTCCGAGCTC	964	QY
QY	1005	ACGGTGTACCAAATACTGACCGGGACATCTCGCTTGAGGGACTTCTCCAGCTG	1064	Db
Db	965	ACACTGATACCAACACTGAGCGGGCATCCCGCTTGGAGCCACCTCTCAGCTG	1024	QY
QY	1065	CCCAAGATAGCACTGAGGGGTTTGAGGACACCCAAGGACATTAGGCC	1124	Db
Db	1025	CCTTGGATGAGCAGGTGAGGGGCTTACGTAAGGCCAGGGACATCAAGGCC	1084	QY
QY	1125	TACTATCCAGGCCACTACCGCCGACATCAACTGAGCTGGAAATCAAGGCCCCAC	1184	Db
Db	1085	TACTATCCAGGCCACTACCGCCGACATCAACTGAGCTGGAAATCAAGGCCCCAC	1144	QY
QY	1185	AACCCGAACTGGAAGGGCTTAAACTCTTCTACTGTTGGACCCAAACGTRACACTG	1244	Db
Db	1145	AACCGCATGTAAGGTTGAGCTCAATCTCTACTCTGGAGCCGGCTGCTCG	1204	QY
QY	1245	GGCTCTGACCAAGGACTATGAGGATCAAGGGGAGAGTACCTGGTGAAGGTRC	1304	Db
Db	1205	GGACACTGCCCAAGGACTACTGAGGATCAATGGGAGAATACTGGAGAGGTRC	1264	QY
QY	1305	CAGTTGTTGAGGACGACACAGGAGATTACAGTCCACTCCATCTGATCACTCG	1364	Db
Db	1265	CAGTTGTTGAGGACGACACAGGAGATTACAGTCCACTCCATCTGATCACTCG	1324	QY
QY	1365	TACCGGACCCGGTCTAGTGGAGTACTCTCTAGACTCCAAAGGACCGTGCCTCA	1424	Db
Db	1325	TACCGGACCCGGTCTAGTGGAGTACTCCAAAGGACCGTGCCTCA	1384	QY
QY	1425	GGATGTTGATGGAACACTGAGGGTCACTGGAGGAACTGCGCTGGACGGCTGG	1484	Db
Db	1385	GGCGAGTCACTGGCTGGACGGGGGGGTATCGAGGGCTGCTGG	1444	QY
QY	1485	GGAGACGTCGCCGAGATATACTGAGGGTCACTGGAGGAACTGCGCTGGACGGCTGG	1544	Db
Db	1445	GGCGAGTCACTGGCTGGACGGGGGGGTATCGAGGGCTGCTGG	1504	QY
QY	1545	ACCTGAAACACGGTGTGAGCCCTCTCTGGCTCTGAGCTGTCACAGCTGT	1604	Db
Db	1505	ACGTGCAAAATAGTGTGAGCCCTCTCTGGCTCTGAGCTGACAGTGT	1564	QY
QY	1605	GGGGAGGAGGAGGAGGGCTGGAGCTGAGGGCTGAGCTGAGGAGCTG	1664	Db
Db	1565	GGAGACACAGGACGACGAGGGGGTGTGAGCTGAGCCCTCTCTGG	1624	QY
QY	1665	GGGAAGGAGTGTCTCTAGAGGAGGAGACTGGAGGAGCTGAGGAGCT	1724	Db
Db	1725	GACGAGGCTTATGAGCAGCTGGTGAATGCTGCTCTGACCAAATATCCTACGCTG	1784	QY
Db	1685	DACGAGGCTCTCTGCCCCAAAGGTGAGCTGTCACCTGACAAACACCTACGCTG	1744	QY
QY	1785	CAAATGGCTTGTGAGCAGGGCACCTGAGTGTGATGGAAGAGGAGCTG	1844	Db
Db	1745	CTCAATGGCTCTGAGCAAGGGCACCTGAGTGTGACGGCTGAGCTG	1804	QY
QY	1845	GATGGTCCATGAGAAAAACTGAGCTGAGCTGAGCTGAGCTGAGCTG	1904	Db
Db	1805	GACGCTGAGAGGACTGCACTGAGCTGAGGTTGCTGAGGAGGAGCTG	1964	QY
QY	1905	GTGTTGGTGGAGCTGAGGAGGGAGGGAGGGCTGCGCTGCGCTCACGCC	2084	Db
Db	1865	GTGTTGGGAGGACGATGGAGGAGGAGGGCTGCGCTGAGGAGGAGCTG	2104	QY
QY	1965	CTGGCAGGGCACTGTTGGAGCTCTCTGAGTGTGATGAGGAGCTG	2044	Db
Db	1925	CTGGCAGGGCACTGTTGGAGCTCTCTGAGTGTGATGAGGAGCTG	1984	QY
QY	2025	GCTATGCTTCTGAGGATACCAAAATTCAAGTACTGAGCTACACGATGTCACGCC	2144	Db
Db	2045	TCTTGGGTTGAGGAGGATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGCT	2284	QY
QY	2145	AAAGTATCATACCCACCTCTTCACTGAGTGTGAGCTGAGGAGCTG	2204	Db
Db	2105	AAGGCATCATCTCCACCCCTCTCATGACTCTCTGAGCTGAGGAGCTG	2164	QY
QY	2205	CTGGAGCTGGAGGAGTCGGTGAAGGAGCTGAGGAGCTGAGGAGCTGAGGCT	2264	Db
Db	2165	CTGGAGCTGGAGAAGCCGAGGAGCTGAGGAGCTGAGGAGCTGAGGAGCTG	2224	QY
QY	2265	GTCACCATGTCCTCCACCCCTCTCATGACTCTCTGAGCTGAGGAGCTG	2334	Db
Db	2225	GCCTCCCATGTCCTCCCTGCCCCAGGACCCCTGGGTCACCGGCTGAGGAGCTG	2284	QY
QY	2325	GAGGGAGTACCGAGGGCTGATCTGGAGAAGGGTGAATGTTGAGGAGCTG	2384	Db
Db	2285	TATGGAGGACTGCGCGCTGATCTGGAGAAGGGTGAATGTTGAGGAGCTG	2344	QY
QY	2385	ACCTGTTGAGGACCTCATCCGGAGGAGCATCACCCAGAATATGTTGAGGAGCTG	2444	Db
Db	2405	ACCTGCGAAACTCTCCGGAGGAGCATCACCCAGAATATGTTGAGGAGCTG	2404	QY
QY	2445	ACCTGCGAAACTCTCCGGAGGAGCATCACCCAGAATATGTTGAGGAGCTG	2394	Db
Db	2465	GATGGGGGGATCTTCCGGAGGAGCATCACCCAGAATATGTTGAGGAGCTG	2524	QY
QY	2565	ACGGCGCCGGTGGACTCTGCGAGGGTATCGGGGGACCCCTGTCACGGTGGAGGG	2464	Db
Db	2525	AGCCAGGGTGTACCAAGGCTCTCTGAGGAGCTGAGGAGCTGAGGAGCTG	2584	QY
QY	2505	GTGGGGGAATCTTCCGGAGGAGCATCACCCAGAATATGTTGAGGAGCTG	2564	Db
Db	2465	GATGGGGGGATCTTCCGGAGGAGCATCACCCAGAATATGTTGAGGAGCTG	2524	QY
QY	2565	ACGGCGCCGGTGGACTCTGCGAGGGTATCGGGGGACCCCTGTCACGGTGGAGGG	2624	Db
Db	2525	AGCCAGGGTGTACCAAGGCTCTCTGAGGAGCTGAGGAGCTGAGGAGCTG	2641	QY
QY	2685	CCTGGTACAGGAGGAGCATGAGCTGAGGAGCTGAGGAGCTGAGGAGCTG	2735	Db
Db	2642	CAAGTGTGACG-CCTCGAGGAGCTGAGGAGCTGAGGAGCTGAGGAGCTG	2699	QY
QY	2745	ACCGAGCTGAGCTGAGGAGCTGAGGAGCTGAGGAGCTGAGGAGCTG	2775	Db

QY 1845 GATGCCCTCATGAGAAACTGTGACTCTGGCTGCAATTACCAACAGGTCC 1904
 Db 1343 GACGCCATCAGTGAAGGAGCTGGGACTCTGGCTGCGGCAATTACAGAACAGGTGT 1284
 QY 1905 GTGGTGGGGCAGAATCGGAGAGGGAGTGCGCTGAGGCTGGAGGTGAGCTCCACGCC 1964
 Db 1283 GTGGTGGGGCAGAATCGGAGAGGGAGTGCGCTGAGGCTGGAGGTGAGCTCCACGCC 1224
 QY 1965 CTGGCCAGGCCACTTGTTGGGGCTGCCTGAGGCTGGAGGTGAGCTCCACGCC 2024
 Db 1223 CTGGCCAGGCCACATCTGGGGCTTCCTACTCTCCACACTGGGTGGCT 1164
 QY 2025 GTCATGCTTCAGGATGACAATAATTCAAGTACTCAGACTACACATGTGAGCGCC 2084
 Db 1163 GCACACTGTCATCGATGACAGAGGATTCAGGATCTGACCCACCGTAGACGCC 1104
 QY 2085 TCTCTGTTGAGAGGGAGTGCGCTTGAGGCTGGGGTGAGGCTGAAGTC 2144
 Db 1103 TCTCTGTTGAGAGGGAGTGCGCTTGAGGCTGGGGTGAGGCTGAAGTC 1044
 QY 2145 AACGATATCATACCCACCCCTCTCTCATGATTCACCTTGACTATGACATGCGCTG 2204
 Db 1043 AACGCGCATCATCCACCCCTCTCATGACTTCACTTGACCTTGACCTG 984
 QY 2205 CTGGAGCTGGAGAGTCGGTGGAGTACAGCACCGTCTGGCTGGCCCATGCTGGCGT 2264
 Db 983 CTGGAGCTGGAGAACCGCGAGTAGCTCATGGTGGGGCCATCTGCTGGCGAC 924
 QY 2265 GCTPACCATATGCTCCCTCGCTGCAAGCCACTTGTCAGGCTGGGGACACAAA 2324
 Db 923 GCTCCCATATGCTCCCTGCGCAAGCCACTTGTCAGGCTGGGGACACAAA 2384
 QY 2325 GAGGGAGGTAACGGAGGCTGATCTGGAGAAGGGTGAATGATCGTGTCAAGGGCTGGGGACACCG 864
 Db 863 TATGGAGGCACTGGCGGCTGATCTGCAAAAGGGTGAAGAACCGCGTCAATACCGGAC 804
 QY 2385 ACCTGTGAGGACTCTGCGCAGACATACCCACGAAAGTATGTTGGTTCTC 2444
 Db 803 ACCTGTGAGGACTCTGCGCAGACATACCCACGAAAGTATGTTGGTTCTC 744
 QY 2445 AGTGGGGTGTGACTCTGCGAGGETGACTCTGCGAGGTGACTCTGGGGCCCTGTCAGGGGGAA 2504
 Db 743 AGGGCGCGGTGACTCTGCGAGGTGACTCTGGGGCCCTGTCAGGGGGAA 684
 QY 2505 GATGGCGAATTCAGGGCTGTCAGGCTCCCTGACTCTGGGACTGATGAGGCTGGCTGAGGACACTGG 2624
 Db 623 AAGCCAGGCGGTGACACAGGCTCCCTGTCAGGCTGAGGCTGGGGCCCTGTCAGGGAC 564
 Db 683 GATGGGGGAGACTTCCAGGGCTGTCAGGCTGGGGCCCTGTCAGGGAC 624
 QY 2625 GATAGCAGCATGGACAGACGCCAACCCAAAGGGATGCCACATCCAA 2684
 Db 563 GATAGGGGGGG--GCCACCAAATGTTACACCTGGGSCACCCATGTCACC 507
 QY 2685 CCTGGTACAGGAGGAACTGTGACGACATTATCTGGCTCCCGCCACACA 2744
 Db 506 CGAGTGTGAGG-CCTGGAGGACTGAGCTGACGACGCC-CCAGA 449
 QY 2745 ACCAGAGCTGTGAACTGCACTCTAGGACTCAGAGT 2780
 Db 448 ACATACATGAACTCAATCTCCAGGGCTCCAAAT 413

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